REMARKS

Claims 1-7 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Okada (US 2002/0018442). Claims 11, 12, 14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over a first embodiment of Okada in view of a second embodiment of Okada. Claims 8, 10, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada in view of Kalkunte et al. (US 2002/0010791). Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okada in view of Dreyer et al. (US 6,098,103).

The Applicant appreciates the careful search and consideration evident in the Office Action, but would request favorable reconsideration of the rejections in view of the following comments.

AMENDMENTS

Claim 1 has been amended for clarity. In particular, the final clause of the claims has been amended to recite "for determining to which port of the other of the at least two industrial network nodes such communications ***are*** addressed." As noted, this amendment is intended to clarify the claim language and is not addressed to the substance of the claim and is not viewed as altering or affecting the claim scope.

REJECTIONS

As noted above, all pending claims stand rejected in view of Okada, either alone or in combination with other references. Of the pending claims, claims 1, 2, 3, and 11 are independent. Each of these claims relies upon and expressly recites a switched network. Claim 1 is reproduced below by way of illustration:

> 1. An industrial network redundancy system for providing communications redundancy between industrial network nodes comprising:
>
> at least two industrial network nodes, each having a plurality of network ports to a switched network;
>
> a plurality of communications paths between respective network ports of the at least two industrial nodes, wherein the plurality of communication paths comprise the switched network; and
>
> a respective data link protocol layer residing on each of the at least two industrial network nodes for determining which of the plurality of communications

> paths to utilize for outgoing communications and for determining to which port of the other of the at least two industrial network nodes such communications are addressed.

(emphasis added). Thus, via either direct recitation or dependency, each pending claim expressly pertains to a switched network.[1] This aspect of the invention can be seen, for example, in Figure 1 of the present application, with respect to switches 121, 123, 125, and 127. The relevant network switches similarly appear expressly in the other figures as well.

The cited art, and in particular Okada, does not pertain to a switched network. Rather, the networks of Okada appear to be traditional collision detection networks. The Office Action points to "0 transmission line 361" and "1 transmission line 362" as possibly indicating the presence of one or more switched networks. *See* Action at page 3. However, the Okada specification expressly describes these elements as traditional networks, not switched networks. For example, see Okada at paragraph [0049]: "The hubs 351-358 are connected in a **ring** to form a **simplex** basic local area network with a ring structure. The hubs 351-358 are classified into first and second groups to raise reliablity [sic] of the **simplex** basic local area network." (emphasis added) Thus, groups 361 and 362 are ring simple networks, not switched networks.

The Action also appears to focus on the "simplex" nature of the Okada networks in certain embodiments as being indicative of switched operation. *See* Action at page 3. However, just the opposite is true. A switched network line is generally full duplex, not simplex (one-way half-duplex) or even two-way half-duplex. Thus, Okada's description of channels as "simplex" indicates conclusively that the Okada networks are not switched. There is no indication in Okada that any embodiments use switching.

Although the secondary references Kalkunte and Dreyer mention network switches, there is no indication in the Action or in any reference that the non-switched system of Okada could be modified to use such a switch without completely changing the Okada network and its mode of operation. In fact, the secondary references further emphasize the fact that a switch is not consistent with Okada's simplex line system. *See, for example,* Dreyer at col. 2,

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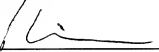
[1] *See also* claims 2, 3, and 11: claim 2 recites "... each [industrial network node] having a plurality of network ports to a switched network;... all of the plurality of communication paths comprising the switched network; and
... wherein the plurality of communications paths are switched ..."; claim 3 recites "...network ports connected to a single switched network, wherein a second industrial network node is also connected to the switched network..."; and claim 11 recites "...first and second node connected via a switched industrial network...."

lines 38-40 ("The most common configuration envisioned for **full-duplex** operation consists of a central bridge (also known as a **switch**) with a dedicated LAN connecting each bridge port to a single device.")(emphasis added).

Conclusion

Thus, it is respectfully submitted that Okada does not teach each element for which it is cited, nor does the combination of references resolve this dilemma. As such, the pending claims are patentable over the cited references whether taken together or individually, and Applicant respectfully submits that the patent application is in condition for allowance. If it is felt that a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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